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PATENT 2700

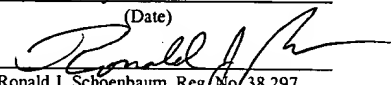
Case Docket No. MERCURY/CP1C1  
Date: July 23, 2002  
Page 1

In re application of : Weinberg, et al.  
Appl. No. : 09/315,795  
Filed : May 21, 1999  
For : SOFTWARE SYSTEM  
AND METHODS FOR  
IDENTIFYING AND  
DISPLAYING  
MODIFICATIONS TO  
WEB SITES  
Examiner : Thu Ha Nguyen  
Art Unit : 2155

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July 23, 2002

(Date)

  
Ronald J. Schoenbaum, Reg. No. 38,297

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**JUL 30 2002**

**Technology Center 2100**

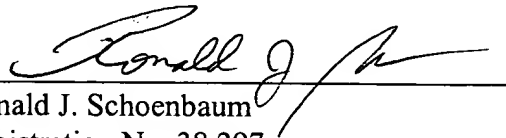
**BOARD OF PATENT APPEALS AND INTERFERENCES  
UNITED STATES PATENT AND TRADEMARK OFFICE  
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Sir:

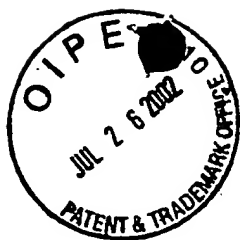
Transmitted herewith in triplicate is an Appellants' Brief to the Board of Patent Appeal, together with:

- (X) Copies of the four cases cited therein;
- (X) The filing fee in the amount of \$320; and
- (X) A return prepaid postcard.

Please charge any additional fees that may be due, or credit any overpayment, to Account No. 11-1410.

  
Ronald J. Schoenbaum  
Registration No. 38,297  
Attorney of Record

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PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Amir Weinberg, et al. ) Group Art Unit: 2155  
Appl. No. : 09/315,795 )  
Filed : May 21, 1999 )  
For : Software System And Methods )  
For Identifying And Displaying )  
Modifications To Web Sites )  
Examiner : Thu Ha Nguyen )

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JUL 30 2002  
Technology Center 2100

APPELLANTS' BRIEF  
PURSUANT TO 37 C.F.R. § 1.192

Board of Patent Appeals and Interferences  
Washington, D.C. 20231

Dear Sir:

Appellants, Applicants in the above-captioned patent application, appeal the final rejection set forth in the Final Office Action mailed on May 29, 2002. A check for the filing fee is enclosed. Please charge any additional fees that may be required now or in the future to Deposit Account No. 11-1410.

**I. REAL PARTY IN INTEREST**

The real party of interest in the present application is Mercury Interactive Corporation.

**II. RELATED APPEALS AND INTERFERENCES**

An appeal is also pending in U.S. Application No. 09/610,909, which is owned by the assignee of the present application. Both applications claim the benefit of a common priority application and are assigned to the same Examiner. In view of the differences between the claimed subject matter of these two applications, Appellants do not believe the Board's decision in either one of these applications will affect the Board's decision in the other.

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### **III. STATUS OF CLAIMS**

Claims 28-70, all of which were finally rejected by the Examiner, are currently pending in the application and are attached hereto as an appendix. Claims 28-35 and 44-70 are the subject of this appeal.

### **IV. STATUS OF AMENDMENTS**

In response to the Final Office Action, Appellants filed an Amendment After Final in which they sought to cancel dependent Claim 44 and add its limitations to corresponding independent Claim 36. The Examiner declined to enter this amendment on the grounds that it raised new issues.

Appellants' Amendment After Final also sought to correct a typographical error in Claim 63 by replacing a semicolon with a period. Appellants assume this amendment has been entered, or that the typographical error has or will be corrected by examiner's amendment.

### **V. SUMMARY OF THE INVENTION**

The present application discloses a software application, and various associated features, for assisting users, such as web site operators, in monitoring and managing web sites. The claims of the present application are directed primarily to a particular application feature that allows users to identify changes made to a web site over a period of time. In accordance with the invention, the web site is crawled or "scanned" to generate a data structure or other representation of the web site. This representation preferably includes information about the various nodes and links of the web site, including attributes which indicate the dates and times of last modification of the site's web pages.

To identify modifications made to the web site between two scanning events, the web site representations generated during the scanning events are compared – preferably on a node-by-node and link-by-link basis. The types of modifications that are identified through this process preferably include new nodes (e.g., Web pages), modified nodes, deleted nodes, new links and deleted links. Some or all of the detected modifications to the web site are highlighted, or otherwise represented, within a graphical map. Preferably, the modifications are highlighted using

a color coding scheme in which respective colors are used to indicate new, modified, deleted and unmodified objects. In one embodiment, the user can selectively hide or conceal each of the following types of objects: new URLs (nodes), modified URLs, deleted URLs, unmodified URLs, new links, deleted links, and unmodified links (see Figure 21). Thus, a web site operator (or other user) can efficiently identify the modifications made to a web site over a period of time, such as a week.

In accordance with one aspect of the invention, the application provides an option for allowing the user to specify a schedule for automatically re-scanning the web site and identifying the modifications. When this option is used, the application may automatically send an email message to a pre-specified user with the results of the comparison process. Using this feature, a web site operator can keep track of web site changes without having to actively initiate scanning sessions, and without having to wait for a scanning session to finish.

One embodiment of a process for scanning the web site is disclosed from page 34, line 6 to page 38, line 27, at in Figures 9 and 10, of the application. An associated object model for storing a representation of the web site is described from page 32, line 4 to page 33, line 2, and is depicted in Figure 8.

One embodiment of a process for comparing two representations of a web site to identify modifications, and for representing the modifications within a graphical site map, is described from page 51, line 10 to page 52, line 16. An example map in which user-specified types of modification are displayed is shown in Figure 21.

## **VI. ISSUES PRESENTED ON APPEAL**

The following issue is presented: whether Claims 28-35 and 44-70 are properly rejected under 35 U.S.C. § 103 as unpatentable over U.S. Patent No. 5,813,007 ("Nielsen") in view of U.S. Patent No. 4,752,889 ("Rappaport").

## **VII. GROUPING OF CLAIMS**

All of the rejected claims in the present application should not stand or fall together. Appellants, for purposes of this appeal only, are grouping the claims as follows:

GROUP 1: Claims 28-33, 35, 44, 45, 47, 50-66, and 68-70. Group 1 includes all of the independent claims of the application. These claims are directed generally to a computer-implemented method for facilitating the management or analysis of a web site – and to a computer program that embodies this method. The claimed method involves scanning the web site at first and second points of time to generate first and second representations of the web site, and comparing these representations to identify modifications made to the web site between the first and second points in time. At least some of these modifications are highlighted, or otherwise represented, in a graphical map.

GROUP 2: Claims 46 and 67. Group 2 consists of dependent claims that further require identification and/or representation of at least the following types of web site modifications: new nodes, new links, modified nodes, deleted nodes, and deleted links.

GROUP 3: Claims 34, 48 and 49. Group 3 consists of dependent claims, all of which require that the web site be scanned automatically according to a pre-defined schedule.

GROUP 4: Claim 51. Group 4, which consists of Claim 51, specifies that the claimed “mapping module” presents the user an option to display or conceal each of the following types of objects within a site map: new nodes, modified nodes, deleted nodes, unmodified nodes, new links, deleted links, and unmodified links. (See Figure 21, in which the term “URL” corresponds to “node.”)

Appellants believe many of the dependent claims recite additional patentable distinctions; however, in the interest of administrative economy and efficiency, Appellants wish to narrow the issues by grouping the claims as set forth above.

## **VIII. ARGUMENT**

### **A. THE CLAIM GROUPS ARE PATENTABLY SEPARATE**

As set forth above, the claims of Group 2 require identification/representation of new nodes, new links, modified nodes, deleted nodes, and deleted links – unlike the claims of Groups 1, 3 and 4. This aspect of the Group 2 claims is not disclosed or suggested by the cited art (as discussed below), and provides a separate basis for patentability.

All of the claims of Group 3 require that the web site be scanned automatically according to a pre-defined schedule – unlike the claims of Groups 1, 2 and 4. As discussed below, this aspect of the Group 3 claims similarly provides a separate basis for patentability.

The single claim of Group 4 requires that the recited “mapping module” present the user an option to display or conceal each of the following types of objects within a site map: new nodes, modified nodes, deleted nodes, unmodified nodes, new links, deleted links, and unmodified links. This feature, which is not recited in the claims of Groups 1-3, is not disclosed or suggested by the cited art and provides a separate basis for patentability.

In view of the foregoing, the Appellants submit that the four claim groups are patentably separate.

#### **B. DISCUSSION OF REFERENCES RELIED UPON BY EXAMINER**

Nielsen discloses a method by which a user who maintains a particular web page can cause other users to be efficiently notified when the web page has significantly changed. Using a web browser, a user can bookmark a web page, and if the server that supplies that web page supports notification subscriptions, can elect to be notified by email when the web page changes. When the maintainer of that web page modifies the page and indicates that the modification is sufficient for notifying subscribers, the server notifies the relevant subscribers by email. The email notifications are automatically incorporated into the browser’s display so that users need not actually read the emails. See col. 8, line 62 to col. 9, line 42.

The method of Nielsen does not appear to involve automatic detection of web site changes, but rather relies on maintainers of web pages to initiate notification events. In addition, the notifications appear to be specific to individual web pages, and thus do not provide an efficient mechanism for tracking changes made across an entire web site.

Rappaport discloses a system to automatically display different links between elements or chunks of knowledge in a knowledge based system. Through a graphical interface, a user can display and maintain functional relationships between the elements of knowledge. For example, the user can select a part of a displayed chunk of information, and perform a command to cause the display of links of a certain nature to other chunks. See col. 2, lines 34-38. The system operates according to a set of rules that can be edited by the user. See col. 4, lines 23-57.

Nielsen and Rappaport fail to disclose Appellants' method for identifying web site modifications. For example, neither reference discloses the scanning of a web site to generate a representation of the web site, and neither reference discloses a process of comparing two representations of a web site to identify modifications made over a period of time. In addition, neither reference discloses or suggests the generation of a graphical map that shows modifications made to the web site over a period of time.

### **C. DISCUSSION OF THE ISSUES ON APPEAL**

For the reasons set forth below, Appellants respectfully submit that the teachings of the Nielsen and Rappaport patents do not render the present invention obvious. Copies of the cited cases are enclosed.

#### **1. The references relied on by the Examiner do not disclose or suggest every limitation in any claim of Group 1**

In order to establish prima facie obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *See* MPEP § 2143.03. In this case, Nielsen and Rappaport fail to satisfy this requirement with respect to the claims of Group 1.

##### **a. Scanning of web site**

For example, all of the claims in Group 1 require that a web site be scanned in order to generate some form of representation of the web site. The term "web site" is defined at the top of page 9 of the present application in-part as "a database or other collection of inter-linked hypertextual documents ('web documents') and associated data entities...." Thus, a single web page is not a "web site" within the meaning of the claims.

In connection with this claim language, the Examiner asserts that Nielsen teaches scanning a web site to generate a data structure which represents the web site at a first point in time. Appellants respectfully disagree. Using a web browser to view or bookmark a single page, as disclosed in the cited portion of Nielsen, does not constitute "scanning a web site to generate a ... data structure which represents the web site." In this regard, a single web page is not a "collection of inter-linked hypertextual documents."

b. Comparison of web site representations

All of the claims in Group 1 also recite limitations involving comparing web site representations (e.g., data structures) to identify modifications made to the web site over a period of time. In connection with this feature, the Examiner relies on the disclosure at col. 12, lines 6-48 of Nielsen. This section of Nielsen describes a process in which a maintainer of a web page can modify the page, and indicate whether those who have subscribed to that page should be notified of the change. There is absolutely no disclosure in the cited section of Nielsen of comparing web site representations to identify modifications made to a web site. In this regard, the notification service in Nielsen apparently becomes aware of web page modifications as the result of actions performed by a maintainer of a web page, and not by performing a comparison as claimed.

Thus, with respect to independent Claim 28, Nielsen does not disclose, among other things, "comparing the first data structure to the second data structure to identify modifications that were made to the web site between the first and the second points in time."

With respect to Claim 44, Nielsen does not disclose, among other things, either "comparing the web site at a first point in time to the web site at a second point in time to identify modifications made to the web site between the first and second points in time," or "comparing the current representation to a prior representation on a node-by-node and link-by-link basis to identify the modifications."

With respect to independent Claim 45, Nielsen does not disclose, among other things, "a comparison module which compares representations of the web site generated by the scanning module at different times to identify modifications made to the web site."

With respect to independent Claim 63, Nielsen does not disclose, among other things, "comparing the first data structure to the second data structure to identify changes made to the web site between the first and the second points in time."

c. Representing web site modifications in graphical map

All of the independent claims of Group 1, as well as Claim 44, also include limitations related to the generation of a graphical map in which at least some of the modifications made to the web site are highlighted or otherwise represented. This feature of the invention is not disclosed or suggested by either Nielsen or Rappaport. In connection with this feature, the Examiner cites Figures 3 and 4, and col. 4, lines 18-59 of Rappaport. These portions of Rappaport do not,



however, disclose the claimed feature. Rappaport discloses at col. 4, line 43 that a user may “modify the current rule,” and at col. 4, lines 48-49 that a user can “enter and modify all of the rules from this interface.” As used by Rappaport, the term “modify” refers to user edits to rules. Because these rules are not part of a “web site,” the edits do not represent modifications to a web site. In addition, there is no suggestion in Rappaport to generate a map that highlights or represents the modifications made between two points of time. Rather, the graphical display in Rappaport appears to merely represent elements within a knowledge base at a given point in time.

Because each claim of Group 1 recites, directly or through dependency from on a base claim, limitations that are not disclosed by either Nielsen or Rappaport, the rejection of the Group 1 claims is improper.

**2. The references relied on by the Examiner do not disclose or suggest every limitation of any claim in Group 2.**

The Group 2 claims (46 and 67) depend from respective independent claims of Group 1. The rejections of the Group 2 claims are therefore improper for the same reasons as set forth above for corresponding Group 1 claims.

In addition, all of the Group 2 claims further require identification or representation of at least the following types of web site modifications: new nodes, new links, modified nodes, deleted nodes, and deleted links. In rejecting these claims, the Examiner relied on various portions of Rappaport, including Figures 3, 4, 9; the abstract; col. 2, lines 5-31; col. 4, lines 18-59; and col. 6, line 45 to col. 7, line 10. These portions of Rappaport generally involve the display of chunks of information, and of links between such chunks. Nothing in Rappaport discloses or suggests the identification or representation of “new nodes, new links, modified nodes, deleted nodes, and deleted links.” In fact, Rappaport does not appear to even involve the detection and display of changes made to the knowledge base described therein.

Because Rappaport does not disclose the limitations recited in any of the Group 2 claims, the rejection of these claims is improper – regardless of whether the corresponding independent claims were properly rejected.

**3. The references relied on by the Examiner do not disclose or suggest every limitation of any claim in Group 3.**

The Group 3 claims (nos. 34, 48 and 49) depend from independent claims of Group 1. The rejections of the Group 3 claims are therefore improper for the same reasons as set forth above for the corresponding Group 1 claims.

In addition, all of the Group 3 claims require that the web site be scanned automatically according to a pre-defined schedule. This feature is desirable because, among other reasons, a user may forget, or may be unavailable, to initiate scanning of the web site at appropriate time intervals. In addition, the time required to scan a large web site may be significant, potentially requiring the user to wait for an extended time period for a manually-initiated scanning session to be completed.

The Examiner takes the position that this feature of the Group 3 claims is disclosed by Nielsen in the abstract, Figure 5, col. 3, lines 17-32, and col. 12, lines 6-48. Appellants respectfully disagree. These portions of Nielsen disclose a process by which a web server notifies subscribers that a particular web page has changed. These portions of Nielsen do not disclose or suggest scanning a web site according to a pre-defined schedule.

Because Nielsen does not disclose or suggest all of the limitations recited in any Group 3 claim, the rejection of the Group 3 claims is improper – regardless of whether the corresponding independent claims were properly rejected.

**4. The references relied on by the Examiner do not disclose or suggest every limitation of the single claim in Group 4.**

The Group 3 claim (no. 51) depends indirectly from independent Claim 45 of Group 1. The rejection of Claim 51 is therefore improper for the same reasons as set forth above with respect to Claim 45.

In addition, Claim 51 specifies that the claimed “mapping module” presents the user an option to display or conceal each of the following types of objects within a site map: new nodes, modified nodes, deleted nodes, unmodified nodes, new links, deleted links, and unmodified links. The Examiner takes the position that this feature is disclosed by Rappaport at Figures 3, 4, 9; the abstract; col. 2, lines 5-31; col. 4, lines 18-59; and col. 6, line 45 to col. 7, line 10. Appellants respectfully disagree. Rappaport does not disclose or suggest, among other things, the display of

deleted nodes, deleted links, or other types of objects that have been deleted. In addition, Rappaport does not disclose or suggest an option for a user to specify which of the enumerated types of objects are to be displayed within a site map. The rejection of Claim 51 is therefore improper.

**5. The Examiner has not identified a valid suggestion for combining the cited references, and no such suggestion exists in the references.**

Appellants further respectfully submit that in rejecting the claims of Groups 1-4, the Examiner has failed to identify a sufficient suggestion or motivation to combine or modify Nielsen and Rappaport. Appellants further submit that no such suggestion or motivation exists within these references.

When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references." See, e.g., In re Rouffet, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). The teaching or suggestion must be found in the prior art, not in applicant's disclosure. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be "clear and particular." In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence' of motivation to combine. Id.

In the present case, the Examiner states that it would have been obvious to combine the teachings of Nielsen and Rappaport "to have the step of generating a graphical map in which at least some of the modifications are represented because it would help the management system to display, check and maintain the functional relationships between elements of the web site." The Examiner's statement is not, however, supported by the cited references or by any other identified source of prior art. In this regard, neither Nielsen nor Rappaport discloses or suggests "a management system to display, check and maintain the functional relationships between the elements of [a] web site."

Applicants further submit that no suggestion or motivation to combine exists within either Nielsen or Rappaport. In this regard, neither reference addresses the problem of allowing a web site manager to efficiently identify the changes that have been made to a web site over a

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period of time. Nielsen is directed to the problem of notifying end users when a bookmarked web page has significantly changed, as indicated by a maintainer of the page. Rappaport is directed to knowledge based systems, and does not appear to suggest functionality for tracking or viewing changes made to a web site over time.

In addition, neither reference discloses or suggests the desirability of the claimed invention. For example, neither reference suggests the desirability of a computer process that automatically identifies and displays modifications made to a web site over time. In addition, neither reference discloses or suggests the desirability of highlighting, or otherwise representing, such modifications within a graphical map to facilitate viewing thereof. Without some teaching of the desirability of the claimed invention, Nielsen and Rappaport cannot properly be combined. See MPEP § 2143.01 ("The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination."), citing *In re Mills*, 916 F.2d 680; 16 USPQ2d 1430 (Fed. Cir. 1990), emphasis original.

Because the Examiner has failed to identify a valid suggestion to combine Nielsen and Rappaport, and because no such suggestion exists in the references themselves, the obviousness rejection is improper – regardless of whether all of the claim limitations are disclosed.

#### IX. CONCLUSION

For the reasons set forth above, Appellants submit that the rejections of Claims 28-35 and 44-70 is improper, and request that these rejections be reversed.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 7-23-02

By: Ronald J. Schoenbaum  
Ronald J. Schoenbaum  
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APPENDIX – PENDING CLAIMS

28. (Amended) A computer-implemented method for facilitating the management of a web site, comprising:

scanning the web site to generate a first data structure which represents the web site at a first point in time, wherein the web site comprises a collection of inter-linked hypertextual documents;

subsequently, after changes have been made to the web site, scanning the web site to generate a second data structure which represents the web site at a second point in time;

comparing the first data structure to the second data structure to identify modifications that were made to the web site between the first and the second points in time; and

generating a graphical map in which at least some of the modifications are represented.

29. The method of Claim 28, wherein generating the graphical map comprises displaying at least one of the following types of objects in a distinct color: new nodes, new links, modified nodes, deleted nodes, and deleted links.

30. The method of Claim 28, wherein generating the graphical map comprises presenting a user an option to specify types of modifications to be displayed within the map.

31. The method of Claim 28, wherein the graphical map includes icons that represent modified web pages, and the method further comprises responding to user selection of an icon that represents a modified web page by displaying the modified web page.

32. The method of Claim 28, wherein generating the graphical map comprises using a layout algorithm to position graphical representations of nodes and links of the web site on a display screen.

33. The method of Claim 28, further comprising automatically sending to a user an email message which lists at least some of the modifications.

34. The method of Claim 28, wherein the web site is scanned and the first and second data structures compared automatically according to a pre-specified schedule.

35. The method of Claim 28, wherein scanning the web site comprises storing attributes which indicate dates and times of last modification of content objects of the web site, and comparing the first and second data structures comprises comparing the attributes of like content objects to identify content objects that have been modified.

36. (Amended) A computer-implemented method for facilitating the analysis of a web site, comprising:

comparing the web site at a first point in time to the web site at a second point in time to identify modifications made to the web site between the first and second points in time, wherein the web site comprises a collection of hypertextual documents interconnected by one or more links; and

generating a graphical map in which at least some of the modifications to the web site are highlighted.

37. The method of Claim 36, wherein generating the graphical map comprises displaying at least one of the following types of objects in a distinct color: new nodes, new links, modified nodes, deleted nodes, and deleted links.

38. The method of Claim 36, wherein generating the graphical map comprises highlighting at least the following types of objects: new nodes, new links, modified nodes, deleted nodes, and deleted links.

39. The method of Claim 36, wherein generating the graphical map comprises presenting a user an option to specify types of modifications to be displayed within the map.

40. The method of Claim 36, wherein the graphical map includes icons that represent modified web pages, and the method further comprises responding to user selection of an icon that represents a modified web page by displaying the modified web page.

41. The method of Claim 36, wherein generating the graphical map comprises using a layout algorithm to position graphical representations of nodes and links of the web site within the map.

42. The method of Claim 36, wherein comparing the web site comprises automatically scanning the web site according to a pre-specified schedule.

43. The method of Claim 42, further comprising sending an email message to a pre-specified address to notify a user of results of an automated scanning and comparison event.

44. The method of Claim 36, wherein comparing the web site comprises scanning the web site to generate a current representation of the web site, and comparing the current representation to a prior representation on a node-by-node and link-by-link basis to identify the modifications.

45. A computer-readable medium having stored thereon a computer program, the computer program comprising:

a scanning module which scans a web site to generate a representation of the web site, the representation specifying at least an arrangement of nodes and links of the web site;

a comparison module which compares representations of the web site generated by the scanning module at different times to identify modifications made to the web site; and

a mapping module which generates a graphical site map in which at least some of the modifications are highlighted.

46. The computer readable medium as in Claim 45, wherein the comparison module automatically identifies at least the following types of modifications: new nodes, new links, modified nodes, deleted nodes, and deleted links.

47. The computer readable medium as in Claim 45, wherein the comparison module uses content object attributes that indicate dates and times of last modification to automatically identify nodes that have been modified.

48. The computer readable medium as in Claim 45, wherein the scanning and comparison modules operate according to a predefined schedule to automatically scan and identify changes to the web site.

49. The computer readable medium as in Claim 48, wherein the comparison module automatically sends an email message to a pre-specified address to notify a user of an automated comparison event.

50. The computer readable medium as in Claim 45, wherein the mapping module presents a user an option to specify types of modifications to be displayed within the site map.

51. The computer readable medium as in Claim 50, wherein the mapping module presents the user an option to display or conceal each of the following types of objects within the site map: new nodes, modified nodes, deleted nodes, unmodified nodes, new links, deleted links, and unmodified links.

52. The computer readable medium as in Claim 45, wherein the mapping module implements a layout algorithm to position graphical representations of nodes and links on a display screen according to an organizational structure of the web site.



53. (New) The method of Claim 28, wherein the graphical map comprises representations of a plurality of nodes of the web site.

54. (New) The method of Claim 53, wherein the graphical map further comprises representations of a plurality of links of the web site.

55. (New) A graphical map generated according to the method of Claim 28.

56. (New) A computer program capable of performing the method of Claim 28.

57. (New) The method of Claim 36, wherein the graphical map comprises representations of a plurality of nodes of the web site.

58. (New) The method of Claim 57, wherein the graphical map further comprises representations of a plurality of links of the web site.

59. (New) A graphical map generated according to the method of Claim 36.

60. (New) A computer program capable of performing the method of Claim 36.

61. (New) The computer-readable medium as in Claim 45, wherein the graphical site map comprises representations of a plurality of the nodes of the web site.

62. (New) The computer-readable medium as in Claim 61, wherein the graphical site map further comprises representations of a plurality of the links of the web site.

63. (New) A computer-implemented method for facilitating the management of a web site, comprising:

scanning the web site to generate a first data structure that includes representations of a plurality of nodes and links of the web site at a first point in time;

subsequently, after changes have been made to the web site, scanning the web site to generate a second data structure that includes representations of a plurality of nodes and links of the web site at a second point in time;

comparing the first data structure to the second data structure to identify changes made to the web site between the first and the second points in time; and

generating a graphical map that depicts at least some of the changes, the graphical map including graphical representations of at least one of the following: (a) nodes that were added to the web site between the first and second points in time; (b) links that were added to the web site between the first and second points in time; (c) nodes that were deleted from the web site between the first and second points in time; (d) links that were deleted from the web site between the first and second points in time; and (e) nodes of the web site that were modified between the first and second points in time.

64. (New) The computer-implemented method as in Claim 63, wherein the graphical map includes representations of at least two of (a)-(e).

65. (New) The computer-implemented method as in Claim 63, wherein the graphical map includes representations of at least three of (a)-(e).

66. (New) The computer-implemented method as in Claim 63, wherein the graphical map includes representations of at least four of (a)-(e).

67. (New) The computer-implemented method as in Claim 63, wherein the graphical map includes representations of all of (a)-(e).

68. (New) The computer-implemented method as in Claim 63, wherein the graphical map is color coded to distinguish between at least some of (a)-(e).

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**Filed** : May 21, 1999

69. (New) The computer-implemented method as in Claim 63, further comprising presenting a user an option to interactively control which of (a)-(e) are to be displayed in the graphical map.

70. (New) A graphical map generated according to the method of Claim 63.

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